

REMARKS/ARGUMENTS

The amendment is in response to the Office Action dated May 20, 2004. Claims 1-90 are pending. Independent claims 1, 27, 53, 67, 75 and 83 were amended, and dependent claims 11-13, 21, 23, 25, 26, 38, 39, 47, 49, 51, and 52 were amended. Accordingly, claims 1-90 remain pending.

Amended Claims

Independent claims 1, 27, 53, 67, 75 and 83 were amended to clarify the present invention. In particular, claims 1, 27 and 53 were amended to recite “providing” and “receiving a plurality of table formatting specifications,” “utilizing the plurality of table formatting specifications to automatically build and store a table function in the database system,” and invoking the table “from within the database system” to access the messaging data.” Claims 67, 75 and 83 were amended to recite “building an invocation mechanism and storing the invocation mechanism in a database.” Support for these amendments are found throughout the Specification at page 10, line 13 - page 14, line 7 (providing/receiving formatting specifications); page 8, lines 16-18, page 9, lines 10-14, page 11, lines 18-21 and page 14, lines 12-13 (building the table function and storing in the database); and page 9, lines 20-21 and page 15, line 6 (table function invoked within an SQL statement). Applicants respectfully submit that no new matter has been presented.

The amendments to the dependent claims merely provide appropriate numbering changes resulting from the amendments to the independent base claims. Accordingly no new matter has been presented.

Objections to the Specification

The Examiner objected to the Specification and the Abstract based on their formats. Applicants have amended the Specification and the Abstract to address the Examiner's concerns.

35 U.S.C. § 112 Rejection

The Examiner rejected claims 11-13 under 35 U.S.C. §112, 2nd paragraph, because claim 11 recited "the providing step (a4) further includes." Applicants have amended claim 11 to correct this oversight, and therefore respectfully submit that the 112 rejection is overcome.

35 U.S.C. §102 Rejection

The Examiner rejected claims 1-5, 10-12, 14-17, 22-24, 26-31, 36-38, 40-43, 48-50, 52-58, 64-65, and 67-90 under 35 U.S.C. §102(e) as being anticipated by Drexter (U.S. App. No. 2002/0046248). Claims 6-9, 32-35 and 59-63 were rejected under 35 U.S.C. §103(a) as being unpatentable over Drexler in view of Demers et al. (U.S. Patent No. 5,870,761). Claims 13 and 39 were rejected under 35 U.S.C. §103(a) as being unpatentable over Drexler in view of Huth et al. (U.S. Patent No. 6,704,742). Claims 18-21, 25, 44-47, 51, and 66 were rejected under 35 U.S.C. §103(a) as being unpatentable over Drexler in view of Poskanzer (U.S. Patent No. 6,658,426).

In so doing, the Examiner stated:

As to claim 1, Drexter teaches a method for converting messaging data into a relational table format in a database system, wherein the messaging data is within a messaging system (see page 1, paragraph 0002), the method comprising the steps of:

(a) providing a table function within the database system, wherein the table function includes a plurality of table formatting specifications (see page 2, paragraph 0029);

(b) invoking the table function to access the messaging data (see pages 2-3, paragraphs 0030-0033); and

(c) converting the messaging data by the table function into specific data types according to the plurality of table formatting specifications, wherein the messaging data is transformed into the relational table format (see page 3, paragraph 0033).

As to claim 67, Drexler teaches a system for generating a customized invocation mechanism (see page 1, paragraph 0002), comprising:

an interface for receiving customizations (see page 3, paragraph 0034-0037); and

a software module coupled to the interface for building an invocation mechanism based on the customization specifications, wherein the invocation mechanism is invocable by a database for access data external to the database (see page 3, paragraphs 0036-0037).

Applicants respectfully traverse.

The present invention is directed to a method and system for converting messaging data into a relational table format in a database. According to the present invention, a programming module running on a client computer system allows a user to provide table formatting specifications that are utilized to automatically build a table function, which is then stored in a database. When invoked from the database via an SQL statement, the table function accesses messaging data stored in a message queue and converts that data into specific data types in relational table format.

The present invention, as recited in claims 1 and 67, provides:

1. A method for converting messaging data into a relational table format in a database system, wherein the messaging data is within a messaging system, the method comprising the steps of:

- (a) providing a plurality of table formatting specifications;
- (b) utilizing the plurality of table formatting specifications to automatically build and store a table function in the database system;
- (c) invoking the table function from within the database system to access the messaging data; and
- (d) converting the messaging data by the table function into specific data types according to the plurality of table formatting specifications, wherein the messaging data is transformed into the relational table format.

67. A system for generating a customized invocation mechanism, comprising:
 an interface for receiving customizations; and
 a software module coupled to the interface for building an invocation mechanism based on the customization specifications and storing the invocation mechanism in a database, wherein the invocation mechanism is invokable by the database for accessing data external to the database.

Independent claims 27 and 53 are computer product and system claims, respectively, having scopes similar to that of claim 1. Independent claims 75 and 83 are method and computer product claims, respectively, having scopes similar to that of claim 67.

In contrast, Drexler is directed to importing an email message into an electronic database. In Drexler, an email to database import utility program receives an email message and parses it into a number of data strings. (§0029). The data strings are then passed to an association block that associates the strings with corresponding database fields. The association block also saves the strings to the fields. (§0033).

In Drexler, the association block is created by a user who selects an email folder from which messages will be imported, inputs identifying criteria and selects a database into which data in a message will be stored. The user also initializes the association block by choosing an email message, selecting a data string, selecting a database field, and saving the selected string to the selected field. (§§ 0034-0036).

Applicants respectfully submit that Drexler fails to teach or suggest “utilizing the plurality of table specifications to automatically build and store a table function *in the database system*,” as recited in claims 1, 27 and 53, or “building an invocation mechanism . . . and *storing the invocation mechanism in a database*,” as recited in claims 67, 75 and 83. In Drexler, the utility program 40 and association block 60 are

independent of and outside of the database 80 (see FIG. 2 and related text, ¶¶ 0029-0033). The only thing that is saved to the database 80 is the parsed data string from the email message. The parsed data string is not equivalent to the present invention's table function/invocation mechanism, which is *built* from the formatting specifications/customization specifications.

In addition, Drexler fails to teach or suggest “invoking the table function *from within the database system*,” as recited in claims 1, 27 and 53, or an “invocation mechanism [that] is *invokable by the database*,” as recited in claims 67, 75 and 83. In Drexler, neither the utility program nor association block are invoked “from within the database system” or “invokable by the database.” Rather, the database in Drexler only receives and stores data strings in fields.

Finally, Drexler fails to teach or suggest “*converting* the messaging data . . . into specific data types,” as recited in claims 1, 27 and 53. According to the present invention, the table function *converts* data from the message into specific data types according to the plurality of table formatting specifications so that the data can be *transformed* into a relational table format. In Drexler, data strings from the message are *associated* with database fields. “The association may be implemented [by] . . . selecting a parsed data string and a corresponding database field, and associating the selected parsed data string with the selected database field.” (¶0033).

Applicants respectfully submit that *associating* data (as in Drexler) is not equivalent to *converting* data (as in the present invention). An association relates to defining a relationship between two elements, e.g., a relationship between a data string and a database field. In contrast, a conversion relates to manipulating or transforming an

element from a first state to a second state, e.g., transforming data into a specific data type. Drexler speaks only of associating data with a database field and makes no mention or suggestion of “converting” the parsed data string into a specific data type.

Based on the foregoing, Applicants respectfully submit that Drexler fails to teach or suggest the present invention, as recited in claims 1, 27, 53, 67, 75 and 83. Accordingly those claims are allowable over Drexler.

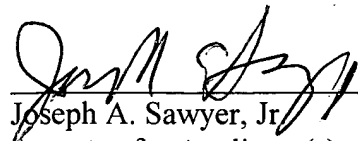
Claims 2-26, 28-52, 54-66, 68-75, 76-82 and 84-90 depend from claims 1, 27, 53, 67, 75 and 83, respectively. Thus, claims 2-26, 28-52, 54-66, 68-75, 76-82 and 84-90 are also allowable over Drexler. Because the secondary references fail to remedy the deficiencies of Drexler, Applicants respectfully submit that dependent claims 2-26, 28-52, 54-66, 68-75, 76-82 and 84-90 are allowable over Drexler in view of the cited references.

Conclusion

In view of the foregoing, Applicants submit that claims 1-90 are allowable over the cited references. Applicants respectfully request reconsideration and allowance of the claims as now presented. Applicant’s attorney believes that this application is in condition for allowance. Should any unresolved issues remain, Examiner is invited to call Applicant’s attorney at the telephone number indicated below.

Respectfully submitted,
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August 19, 2004
Date



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